

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification <sup>7</sup> : C01B 33/32, B01J 6/00</p>	<p>A1</p>	<p>(11) International Publication Number: <b>WO 00/09444</b> (43) International Publication Date: 24 February 2000 (24.02.00)</p>
<p>(21) International Application Number: PCT/KR98/00462 (22) International Filing Date: 24 December 1998 (24.12.98) (30) Priority Data: 1998/32993 14 August 1998 (14.08.98) KR (71) Applicant (for all designated States except US): KOREA RE-SEARCH INSTITUTE OF CHEMICAL TECHNOLOGY [KR/KR]; 100, Jang-dong, Yusung-ku, Daejeon 305-343 (KR). (72) Inventors; and (75) Inventors/Applicants (for US only): LEE, Jung, Min [KR/KR]; 383-22, Doryong-dong, Yusung-ku, Daejeon 305-340 (KR). SUH, Jeong, Kwon [KR/KR]; 136-906, Hanbit Apt., Uheun-dong, Yusung-ku, Daejeon 305-333 (KR). JEONG, Soon, Yong [KR/KR]; 113-603, Nuri Apt., Woelpyung-dong, Seo-ku, Daejeon 302-280 (KR). PARK, Chun, Hee [KR/KR]; 25-501, Misung Apt., Apgujung-dong, Kangnam-ku, Seoul 135-110 (KR). PARK, Jeong, Hwan [KR/KR]; 107-203, Mujikae Apt., Woelpyung-2dong, Seo-ku, Daejeon 302-282 (KR). KIM, Jong, An [KR/KR]; 3-204, Sujong Apt., 909, Doonsan-2dong, Seo-ku, Daejeon 302-173 (KR).</p>	<p>(74) Agent: HUH, Sang, Hoon; Hyecheon Building, 13th floor, 831, Yeoksam-dong, Kangnam-ku, Seoul 135-792 (KR). (81) Designated States: CN, JP, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). <b>Published</b> With international search report.</p>	
<p>(54) Title: <u>AN IMPROVED METHOD FOR MANUFACTURING CRYSTALLINE LAYERED SODIUM DISILICATE</u></p>		
<p>(57) Abstract</p> <p>The present invention relates to an improved method for manufacturing a crystalline layered sodium disilicate and more particularly, to the improved method for manufacturing the crystalline layered sodium disilicate comprising the steps including the preparation of granules in a certain ratio of anhydrous sodium silicate cullet, a starting material, in the presence of some binders such as water and an aqueous solution of sodium silicate, followed by a crystallization step of the granules, thus ensuring that a small amount of final product is recycled to the prior crystallization step in order to prevent the attachment of granules to an inner crystallization device, which occurs due to local sintering in a high-temperature crystallization condition of continual process and also to further enhance the unit productivity during the mass production of crystalline layered sodium disilicate.</p>		